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A NEW WOOD RAT FROM ARIZONA.

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Grinnell and Swarth (Univ. Calif. Pub. Zool., X, p. 336, 1913) direct attention to the apparent intergradation of wood rats described as *Neotoma intermedia* and *Neotoma desertorum*, respectively, within a narrow strip along the eastern base of the San Jacinto Mountains, California. As stated by them this is not in accord with the findings of the writer who, in revising the genus (North Amer. Fauna, No. 31, pp. 14-15, 1910), regarded these forms as members of different groups. When the genus was revised, however, very scanty material was available from the region in question. On the basis of the new accessions I concur with Grinnell and Swarth in their conclusion that, owing to intergradation, *N. desertorum* should be reduced to subspecific rank under *N. intermedia*, in accordance with the rule of priority.

The range of *N. intermedia* and subspecies therefore includes a vast area west of the Colorado River. East of the river, however, it is known to have become established only within a limited territory, specimens from which are found to represent a rather well-marked new geographic race described as follows:

Neotoma intermedia devia, subsp. nov.
PAINTED DESERT WOOD RAT.

Type.—From Tanner Tank (altitude 5,200 feet), Painted Desert, Arizona. No. 226,376, ♀ adult, U. S. National Museum (Biological Survey collection), collected by E. A. Goldman, July 27, 1917. Original number, 23,152.

General characters.—Closely allied to *Neotoma intermedia desertorum*, but general color grayer, less buffy, and skull differing in detail. Pelage soft as in *desertorum*.

Color.—Type: Upper parts in general, including top of head and dorsum,



pale grayish buff heavily lined with black, the buffy element becoming richer and inclined to pinkish buff on lower part of cheeks and along sides; under parts overlaid with pale pinkish buff continuous with tone of lower part of sides, except on very small pectoral and inguinal areas, where the hairs are pure white to roots; feet white; tail above blackish, finely and inconspicuously lined with light hairs to near tip which is nearly pure black, below light buffy, becoming brownish toward tip. Topotypes vary in buffy color tone; some individuals are darker than the type but two more nearly approach *N. i. desertorum*.

Skull.—Similar to that of *N. i. desertorum*, but averaging more massive; interparietal decidedly larger, more extended antero-posteriorly; incisive foramina about equal in length to palatal bridge (usually decidedly longer than palatal bridge in *desertorum*); nasals usually broader posteriorly.

Measurements.—Type: Total length, 298; tail vertebrae, 135; hind foot, 31.5. Average and extremes of 4 adult topotypes: 287 (280–292); 131 (127–134); 31 (30–32). *Skull* (type): Greatest length, 39.3; zygomatic breadth, 20.2; interorbital breadth, 4.8; length of nasals, 14.5; length of incisive foramina, 7.7; length of palatal bridge, 7.7; maxillary tooth row, 8.2.

Remarks.—This geographic race presents another interesting example of the general effectiveness of the Colorado River as a barrier limiting the distribution of certain small rodents. Specimens of the forms of *N. intermedia* inhabiting the north and south sides of Grand Canyon are strikingly different in color and cranial details, although obviously very closely related. Two examples from Parker are of the usual grayish coloration characterizing *N. i. devia*, but the skulls are rather small and delicate with small interparietal and suggest an approach to *desertorum*.

In the revision of the genus by the author (l. c. p. 80) the ranges of *N. desertorum* and *N. lepida* were stated to be completely separated by the Colorado River. The subsequent collection within the range of *N. lepida* of the specimens upon which the form here described is based proves the statement to have been an error. *N. intermedia devia* and *N. lepida stephensi* are now known to occur in close proximity along the southern wall of Grand Canyon.

Specimens examined.—Total number, 40, from localities as follows:

Arizona: Cedar Ranch Wash (Painted Desert), 1; Colorado River (mouth of Diamond Creek), 1; Grand Canyon (Indian Gardens), 3; Grand Canyon (Bass Camp), 11; Kingman, 2; Parker, 2; Tanner Tank (type locality), 20.